

# STATE OF CONNECTICUT

### CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@po.state.ct.us Web Site: www.state.ct.us/csc/index.htm

December 23, 2003

Michele G. Briggs Manager of Real Estate Southwestern Bell Mobile Systems, LLC 500 Enterprise Drive Rocky Hill, CT 06067-3900

RE: EM-CING-085-031212- Southwestern Bell Mobile Systems, LLC notice of intent to modify an existing telecommunications facility located at 500 Moose Hill Road, Monroe, Connecticut.

Dear Ms. Briggs:

At a public meeting held on December 22, 2003, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated December 12, 2003. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

Pamela B. Katz, P.E. &

Chairman

PBK/laf

c: Honorable Andrew J. Nunn, First Selectman, Town of Monroe Daniel A. Tuba, Planning Administrator, Town of Monroe Thomas Nolan, Connecticut Architectural Towers, LLC Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP Christopher B. Fisher, Esq., Cuddy & Feder LLP Stephen J. Humes, Esq., LeBoeuf Lamb Greene & MacRae LLP



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December 16, 2003

Honorable Andrew J. Nunn First Selectman Town of Monroe Town Hall 7 Fan Hill Road Monroe, CT 06468-1800

RE: EM-CING-085-031212- Southwestern Bell Mobile Systems, LLC notice of intent to modify an existing telecommunications facility located at 500 Moose Hill Road, Monroe, Connecticut.

Dear Mr. Nunn:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for December 22, 2003 at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Executive Director

SDP/cm

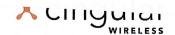
Enclosure: Notice of Intent

cc: Daniel A. Tuba, Planning Administrator, Town of Monroe



EM-CING-085-031212





Southwestern Bell Mobile Systems, LLC

500 Enterprise Drive

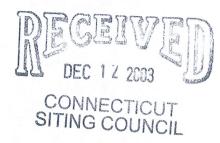
Rocky Hill, Connecticut 06067-3900

Phone: (860) 513-7700 Fax: (860) 513-7190

Michele G. Briggs Manager of Real Estate

December 12, 2003

Ms. Pam Katz, Chairman Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051



Re: Notice of Exempt Modification – Existing CAT Telecommunications Tower Facility at 500 Moose Hill Road, Monroe, Connecticut

Dear Chairman Katz:

Southwestern Bell Mobile Systems, LLC ("SBMS") intends to install telecommunications antennas and associated equipment at an existing multicarrier telecommunications tower off Moose Hill Road in Monroe, Connecticut.

The Monroe facility is located at 500 Moose Hill Road, on the grounds of St. John's Cemetery. Tower coordinates (NAD 83) are N 41° 19' 18" and W 73° 12' 05". The facility is owned and operated by Connecticut Architectural Towers, LLC ("CAT"), with offices at 1 Post Road, Fairfield, CT 06824. CAT leases the land from St. John the Baptist Greek Catholic Cemetery Association, Inc.

Please accept this letter as notification to the Council, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter is being sent to the Selectman of Monroe.

SBMS, the local component of the nationwide Cingular Wireless network, is licensed by the Federal Communications Commission ("FCC") to provide cellular mobile telephone service in the Bridgeport Connecticut Metropolitan Statistical Area, which includes the area to be served by SBMS' proposed installation. The public need for cellular service has been predetermined by the FCC.

CAT has agreed to plans put forth by SBMS pursuant to mutually acceptable terms and conditions and has also authorized SBMS to obtain necessary government approvals. Attached to this Notice are a site location map, a proposed site plan, the proposed tower profile, and a structural analysis report that shows the tower is structurally capable of supporting the proposed SBMS telecommunications equipment.

The CAT facility was approved by the Council in Docket 207 on March 21, 2002 as a 130-foot monopole. The Council subsequently approved an increase in height from 130 feet to 150 feet in Petition 628T on June 19, 2003. The extension has been installed.

The Moose Hill Road facility consists of a 150-foot monopole within a roughly 80' x 100' rectangular compound surrounded by an 8-ft high chain link fence. Sprint operates panel antennas at the top of the 147.5' monopole and equipment cabinets mounted on a concrete pad. AT&T operates panel antennas at the 127.5' level of the tower and has its equipment on a concrete pad. T-Mobile operates panel antennas at the 117.5' level and has equipment on a concrete pad.

As shown on the attached drawings and as further described below, SBMS proposes to install up to twelve Decibel Products DB846H80E-SX panel antennas, approximately 72 inches in height, with the center of radiation approximately 137.5 feet above ground level. SBMS also proposes to place a 12' x 20' prefabricated concrete equipment building at the base of the tower. All work will be done inside the existing fenced compound.

With the "GSM-only" configuration, SBMS will broadcast up to:

■ 4 channels, 296 Watts ERP, 880 – 894 MHz;

### **Statutory Considerations**

The changes to the Monroe tower facility do not constitute a modification as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2) because they will not result in any substantial adverse environmental effect.

- 1. The height of the overall structure will be unaffected.
- 2. The proposed changes will not affect the property boundaries. All new construction will take place on property leased by CAT and within the existing fenced compound.
- 3. The proposed additions will not increase the noise level at the existing facility by six decibels or more.
- 4. Operation of the additional antennas will not increase the total radio frequency electromagnetic radiation power density, measured at the tower base, to or above the standard adopted by the State of Connecticut and the FCC. The "worst-case" exposure calculation in accordance with FCC OET Bulletin No. 65 (1997) for a point of interest at the base of the tower in relation to the operation of the currently proposed antenna array is as follows:

Company	Centerline Height (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density <sup>†</sup> (mW/cm <sup>2</sup> )	Standard Limits (mW/cm²)	Percent of Limit
Sprint *	147.5	1962	not given		0.0400	1.0000	4.00
Cingular GSM	137.5	880 - 894	4	296	0.0225	0.5867	3.84
AT&T*	127.5	D: 1945 E: 1985	not given		0.0885	1.0000	8.85
T-Mobile *	117.5	1930	not given		0.0415	1.0000	4.15
Total							20.84%

\* Power density parameters taken from and from Petition 628T.

As the table demonstrates, the cumulative "worst-case" exposure would be approximately 21% of the ANSI/IEEE standard, as calculated for mixed frequency sites. Total power density levels resulting from SBMS' use of the tower facility would thus be within applicable standards.

For the foregoing reasons, SBMS respectfully submits that proposed changes to implement expanded shared use at the Monroe site constitute an exempt modification under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (860) 513-7700 with questions concerning this application. Thank you for your consideration in this matter.

Respectfully yours,

Michele G. Briggs

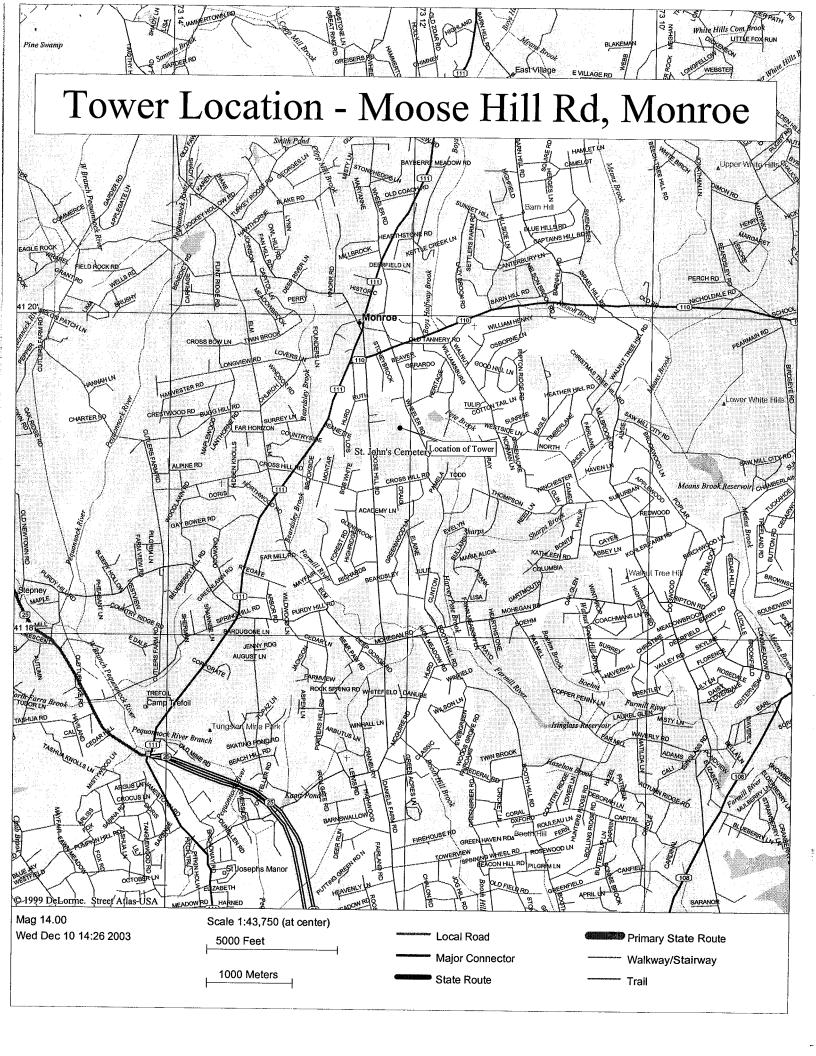
Manager of Real Estate

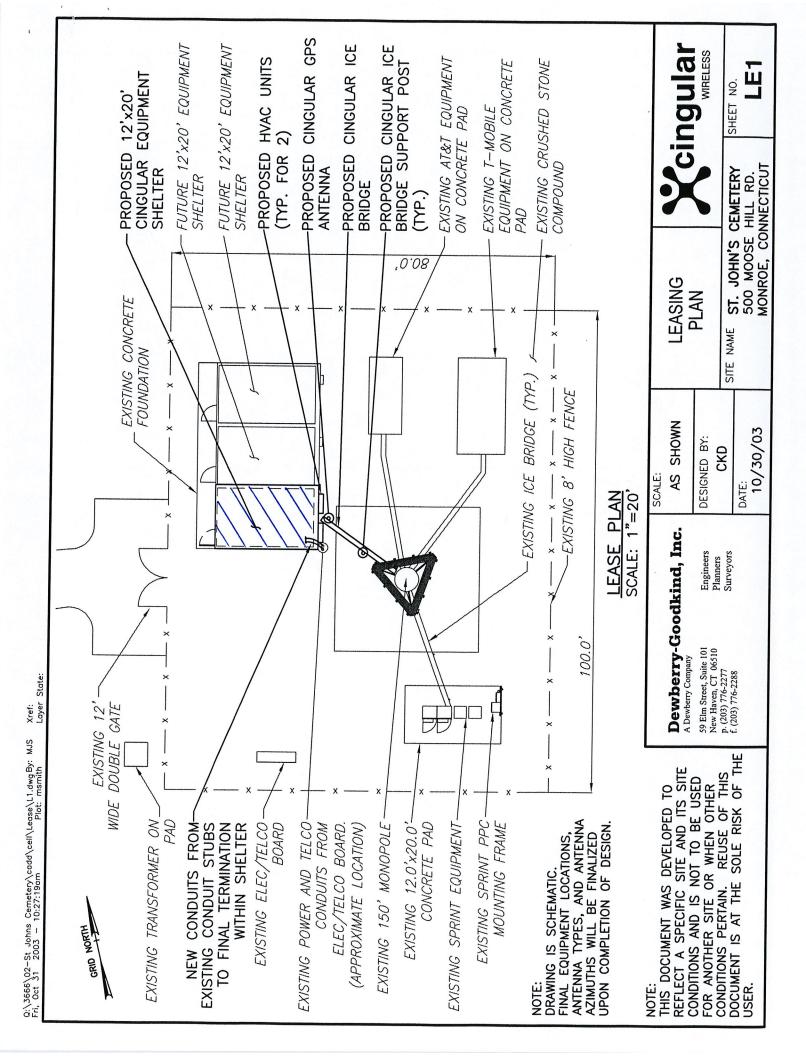
**Enclosures** 

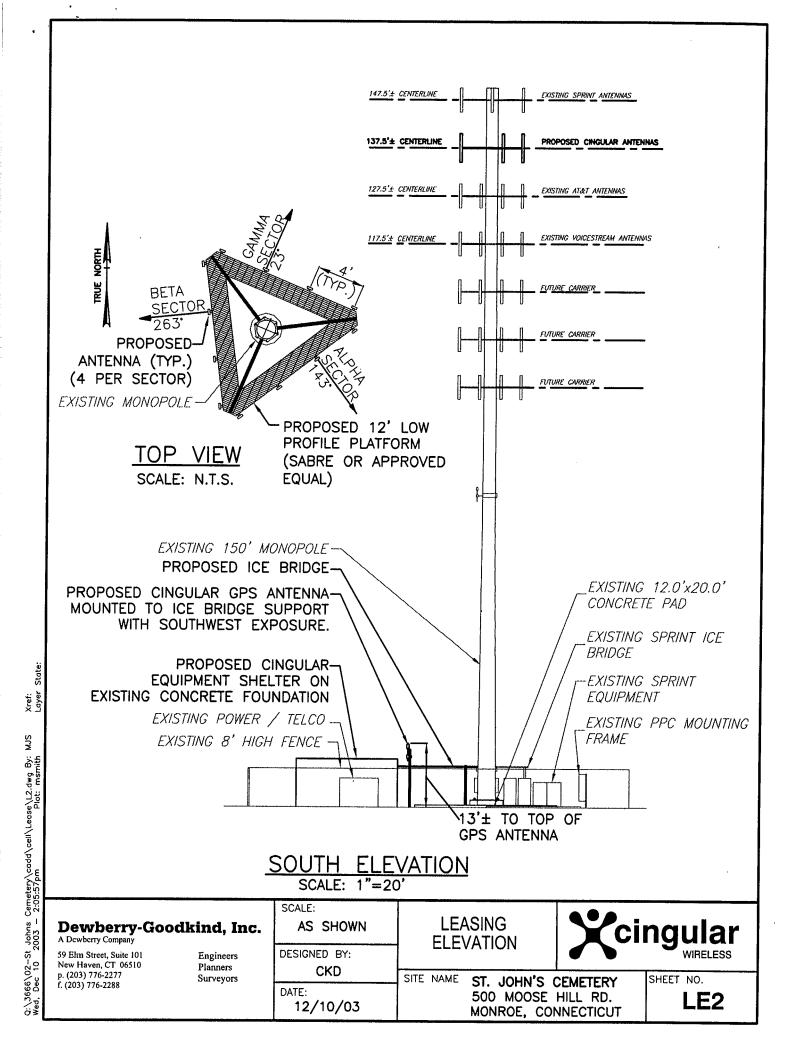
cc: Honorable Andrew J. Nunn, Selectman, Town of Monroe

Michele S. Briggs SCL

Please note that the standard power density equation provided by the Council in its memo of January 22, 2001 incorporates a ground reflection factor of 2.56 (i.e., the square of 1.6) as described in FCC OET Bulletin No. 65.







203 776 2277 203 776 2288 fax www.dewberry.com

November 21, 2003

Mr. Steve Schadler Cingular Wireless 500 Enterprise Drive, 3<sup>rd</sup> Floor Rocky Hill, CT 06067

Re:

St John's Cemetery

500 Moose Hill Road, Monroe, CT

Structural Assessment of 150-Foot Monopole

Dear Mr. Schadler:

In accordance with the requirements of Section 108.1.1 of the Connecticut State Building Code (CSBC) we have completed a structural assessment of the existing monopole structure, at the above referenced site, to support the proposed Cingular Wireless antennas, frames and coaxial cables. The Cingular installation will be at an elevation of 137.5 ft above grade and will be the second array from the top of the monopole. We have reviewed the monopole and foundations calculations dated April 2, 2002 prepared by Sabre Communications Corporation for James E. Dwyer Co., Inc.

Section 1609.1 of the CSBC addresses radio and television towers and references Section 3108.4 of the 1996 BOCA Code. The BOCA Code references EIA/TIA 222-E for antenna supporting structures. The Sabre analysis of the monopole and foundations is based on the later version of this code, TIA/EIA 222-F, which includes all of the requirements of EIA/TIA 222-E.

The original monopole was 130ft high and was extended 20ft to support two arrays of panel antennas, including the Cingular installation as described above. The Sabre analysis assumes the extended pole will be loaded by a total of seven arrays of 12 panel antennas on low profile platforms between elevations 90ft and 150ft with approximately 10ft separations. There are three existing carriers with antennas on the pole; The Cingular installation will be the fourth. The structure was analyzed in spreadsheet format with an inhouse computer program by Sabre. The lateral wind loads and the gravity loads were calculated by the program in accordance with the requirements of TIA/EIA 222-F. These loads were used to determine the forces in the monopole sections and the foundation vertical and horizontal reactions and overturning moment. Hand calculations by Dewberry-Goodkind, Inc. confirmed the results of the computer analysis after discussions with the Sabre professional engineer, Keith Tindall P.E, to clarify assumptions made by Sabre that were not stated in the calculations.

Upon review of the signed and sealed calculations and sketches prepared by Sabre Communications Corporation it is our conclusion that there is ample capacity in the monopole, extended by 20ft, and the foundations to safely support the proposed Cingular installation. The design is therefore in compliance with the Connecticut State Building Code.

Please feel free to contact us if you have any questions.

Very truly yours,

Dewberry-Goodkind, Inc.

Herbert E. Browne, P.E. Director, Building Structures

Dewberry-Goodkind, Inc.







Southwestern Bell Mobile Systems, LLC

500 Enterprise Drive

Rocky Hill, Connecticut 06067-3900

Phone: (860) 513-7700 Fax: (860) 513-7190

Michele G. Briggs Manager of Real Estate

December 12, 2003

Honorable Andrew J. Nunn Selectman, Town of Monroe Town Hall, 7 Fan Hill Rd. Monroe, Connecticut 06468

Re: Notice of Exempt Modification – Existing CAT Telecommunications Tower Facility at 500 Moose Hill Road, Monroe, Connecticut

Dear Mr. Nunn:

Southwestern Bell Mobile Systems, LLC ("SBMS") intends to install telecommunications antennas and associated equipment at an existing multicarrier telecommunications tower at St. John's Cemetery off Moose Hill Road in Monroe, Connecticut.

The facility is owned and operated by Connecticut Architectural Towers, LLC ("CAT"), with offices at 1 Post Road, Fairfield, CT 06824. CAT leases the land from St. John the Baptist Greek Catholic Cemetery Association, Inc.

A Notice of Exempt Modification has been filed with the Connecticut Siting Council as required by Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-73. Please accept this letter as notification to the Town of Monroe under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The attached letter fully sets forth the SBMS proposal. However, if you have any questions or require any further information on the plans for the site or the Siting Council's procedures, please contact the undersigned or Mr. Derek Phelps, Executive Director of the Connecticut Siting Council, at (860) 827-2935.

Sincerely,
Michele D. Briggs 540

Michele G. Briggs Manager of Real Estate

**Enclosure**